

Work Order ID 68947

Tuesday, April 26, 2011 10:42:00 AM



Page 1

Item ID: D3500-1

Accept



Setup Start



Revision ID:

Item Name: Saddle

Stop



Start Date: 4/26/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 5/24/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan:

Date: 11/04/26 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
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100



HAAS CNC VERTICAL MACHINING #1

0.00

HAAS 1

Memo

0.00

12 8

HAAS CNC vertical machine #1

Program Batch No 68947 Double check by: only 1-Machine Step No 1 per Folio FA641 and inspect per attached Dimension Sheets 2-Machine Step No 2 per Folio FA641 and inspect per attached Dimension Sheets 3-Machine Step No 3 per Folio FA641 and inspect p

SL/ark 11/09/26

110



QC2- Inspect parts off machine FAI/FAIB

0.00

SL/ark 11/09/26

QC

Memo

0.00

12 8

Quality Control

120



QC8- Inspect parts - second check

0.00

2 11. 9. 26

QC

Memo

0.00

12 8

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 68947

Tuesday, April 26, 2011 10:42:00 AM



Page 2

Item ID: D3500-1

Accept



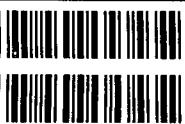
Setup Start



Revision ID:

Item Name: Saddle

Stop



Start Date: 4/26/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 5/24/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



Chemical Conversion Coat per QSI005 4.1

0.00

12 BL 11-9-26

HandFinish

Memo

0.00

Hand Finishing

140



White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Powdercoat

Memo

82-45
0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

3-15

320²⁵

12x 6m 140/27

150



QC3- Inspect Part Finish

0.00

QC

Memo

0.00

Quality Control

4/27/27 R

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 68947

Tuesday, April 26, 2011 10:42:00 AM



Page 3

Item ID: D3500-1

Accept



Setup Start



Revision ID:

Item Name: Saddle

Stop



Start Date: 4/26/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 5/24/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

160



Packaging

Packaging

Operation
Description

Identify as per dwg & Stock Location:

ST424

Set Up/
Run Hours

0.00

(12) Sp 11-09-28

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170



QC

Quality Control

Memo

0.00

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

12 BK 11-9-28

11-09-28

MF 11-04-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, April 26, 2011 10:42:06 AM

Page 1

Work Order ID: 68947



Parent Item: D3500-1



Parent Item Name: Saddle

Start Date: 4/26/2011

Required Date: 5/24/2011

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 06-06-15 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6102-013 		Manufactured	No			100	Each	12.0000	1	12		SL 11-09-24	

Saddle Billet

Location	Loc Qty	Loc Code
MAT043	12	
59467	30	
60713	80	
61300	10	

70674

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD				Work Order:	68947
Description: Saddle				Part Number:	D3500-1
Inspection Dwg: D3500 Rev: C				Page 1 of 1	

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				
				1	2	3	4	By 5
A	0.483	0.490		.485	.485	.485	.485	.485
B	1.175	1.185		1.180	1.180	1.180	1.180	1.180
C	3.145	3.155		3.150	3.150	3.150	3.150	3.150
D	1.175	1.185		1.180	1.180	1.180	1.180	1.180
E	0.365	0.385		.376	.376	.376	.376	.376
F	0.490	0.510		.499	.500	.501	.500	.500
H								
(Note: Dimension I is 0.015" over flange)								
I	R1.575	R1.595		1.588	1.588	1.587	1.588	1.588
J	0.240	0.260		.245	.245	.246	.245	.246
K	0.490	0.510		.500	.500	.500	.500	.500
L	3.590	3.650		3.625	3.625	3.625	3.625	3.625
M	0.315	0.322		.316	.316	.316	.316	.316
N	0.256	0.262		.257	.257	.257	.257	.258
O	6.500	6.520		6.510	6.510	6.510	6.510	6.510
P	5.990	6.010		6.000	6.000	6.000	6.000	6.000
Q	2.820	2.830		2.825	2.825	2.825	2.825	2.825
R	2.495	2.505		2.500	2.500	2.500	2.500	2.500
S	2.245	2.255		2.250	2.250	2.250	2.250	2.250
T	1.120	1.130		1.125	1.125	1.125	1.125	1.125
U	0.540	0.560		.548	.548	.549	.549	.550
V	0.793	0.803		.798	.798	.798	.798	.798
W	R.240	R.260		.250	.250	.250	.250	.250
X	0.040	0.060		.050	.050	.050	.050	.050
Y	0.100	0.120		.110	.110	.110	.110	.110
AA	R1.125	R1.145		1.131	1.136	1.135	1.136	1.136
AB	R.490	R.510		.500	.500	.500	.500	.500
AC	0.615	0.635		.635	.635	.635	.635	.635
AD	0.240	0.260		.254	.253	.253	.253	.254
AE	1.810	1.830		1.821	1.819	1.820	1.820	1.820
AF	0.240	0.260		.250	.251	.250	.251	.249
AG	0.140	0.160		.150	.150	.150	.150	.150
AH	0.140	0.160		.152	.154	.153	.153	.152
AI	0.140	0.160		.155	.151	.152	.152	.147
Accept/Reject								

Measured by:	→ / onf	Audited by:	→
Date:	11-09-23 / 11/09/26	Date:	11-9-25

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	
D	11.01.17	Note added to Dim I	KJ	→ A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD				Work Order:						
Description: Saddle				Part Number:			D3500-1			
Inspection Dwg: D3500			Rev: C	Page 1 of 1						
				Recorded Actual Dimensions						
Dim	Min	Max	Go/No Go Gauge	17	18	19	10	Byll Date 12		
A	0.483	0.490		.486	.486	.486	.486	.486		
B	1.175	1.185		1.180	1.180	1.180	1.180	1.180		
C	3.145	3.155		3.150	3.150	3.150	3.150	3.150		
D	1.175	1.185		1.180	1.180	1.180	1.180	1.180		
E	0.365	0.385		.377	.380	.380	.377	.377		
F	0.490	0.510		.500	.500	.500	.500	.500		
H										
(Note: Dimension I is 0.015" over flange)										
I	R1.575	R1.595		1.590	1.591	1.592	1.593	1.593		
J	0.240	0.260		.246	.246	.246	.245	.245		
K	0.490	0.510		.500	.500	.500	.500	.500		
L	3.590	3.650		3.625	3.625	3.625	3.625	3.625		
M	0.315	0.322		.317	.317	.316	.316	.316		
N	0.256	0.262		.258	.258	.258	.258	.258		
O	6.500	6.520		6.570	6.570	6.570	6.570	6.570		
P	6.000	6.010		6.000	6.000	6.000	6.000	6.000		
Q	2.820	2.830		2.825	2.825	2.825	2.825	2.825		
R	2.495	2.505		2.500	2.500	2.500	2.500	2.500		
S	2.245	2.255		2.250	2.250	2.250	2.250	2.250		
T	1.120	1.130		1.125	1.125	1.125	1.125	1.125		
U	0.540	0.560		.548	.550	.550	.550	.550		
V	0.793	0.803		.798	.798	.798	.798	.798		
W	R.240	R.260		.250	R.250	.250	.250	.250		
X	0.040	0.060		.050	.050	.050	.052	.053		
Y	0.100	0.120		.110	.110	.110	.110	.111		
AA	R1.125	R1.145		1.133	1.133	1.134	1.136	1.136		
AB	R.490	R.510		.500	R.500	.500	.500	.500		
AC	0.615	0.635		.635	.635	.635	.635	.635		
AD	0.240	0.260		.255	.255	.255	.255	.254		
AE	1.810	1.830		1.820	1.820	1.820	1.821	1.821		
AF	0.240	0.260		.257	.250	.257	.254	.254		
AG	0.140	0.160		.152	.152	.155	.155	.155		
AH	0.140	0.160		.157	.157	.150	.157	.157		
AI	0.140	0.160		.152	.152	.150	.149	.150		

Accept/Reject

Measured by: *CMK*
Date: 11/09/26

Audited by: *RP*
Date: 11. 9. 26

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	
D	11.01.17	Note added to Dim I	KJ	<i>SD</i> <i>AD</i>

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

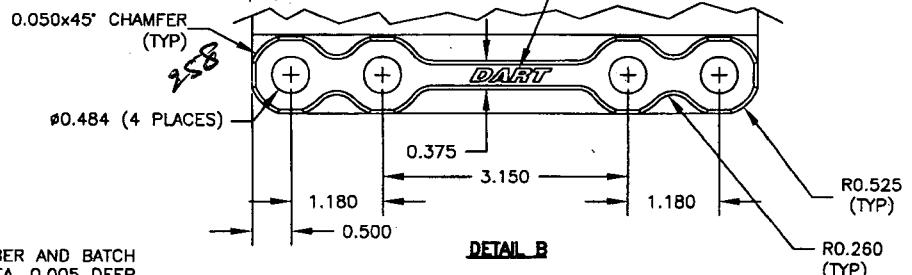
WITHOUT NOTICE

WORK ORDER

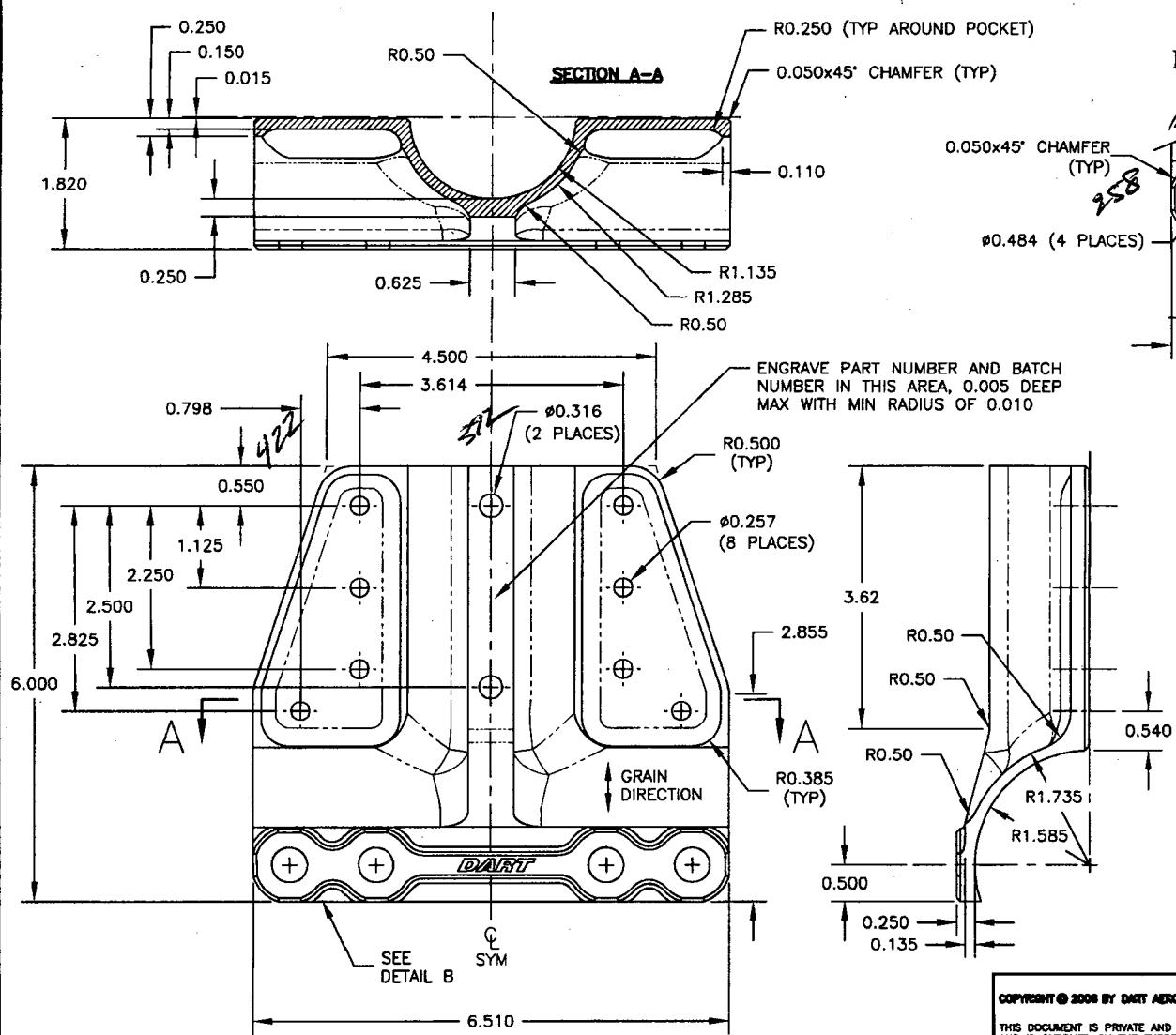
NO. 68947

PL1109-26

ENgrave DART logo in this area to a max depth of 0.015 and a min. tool radius of 0.250



DETAIL B



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C	06.06.30	MAT'L NOW 6061-T6/T651
B	06.05.29	CHANGE DIMS; MAT'L NOW 7075-T7351
A	06.04.18	NEW ISSUE
DESIGN	DRAWN BY	DART
97	PH	DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3500
<i>4</i>	<i>4</i>	REV. C
DATE	TITLE	SCALE
06.06.30	SADDLE	2:3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries